

FIG. 1

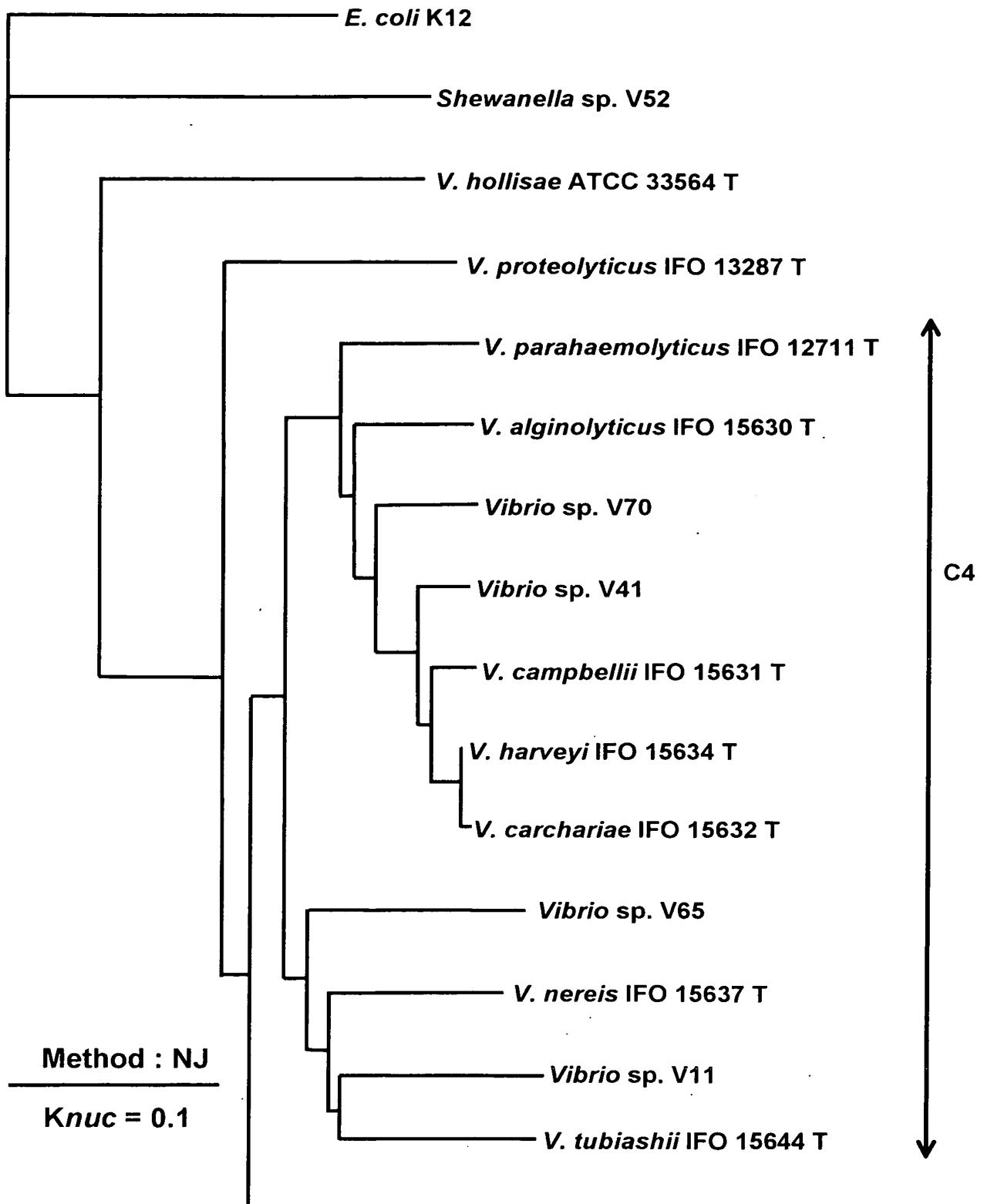


FIG. 1

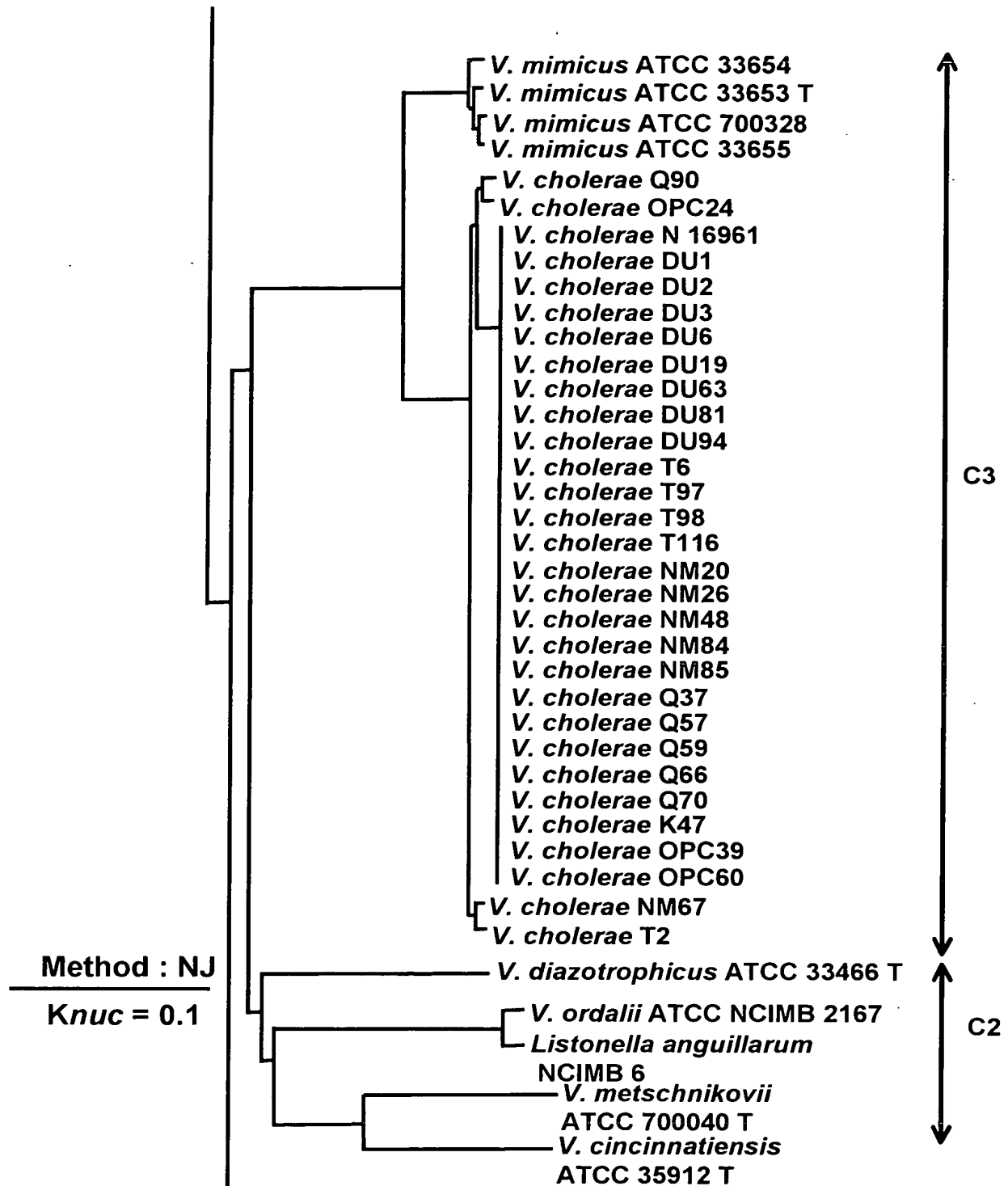


FIG. 1

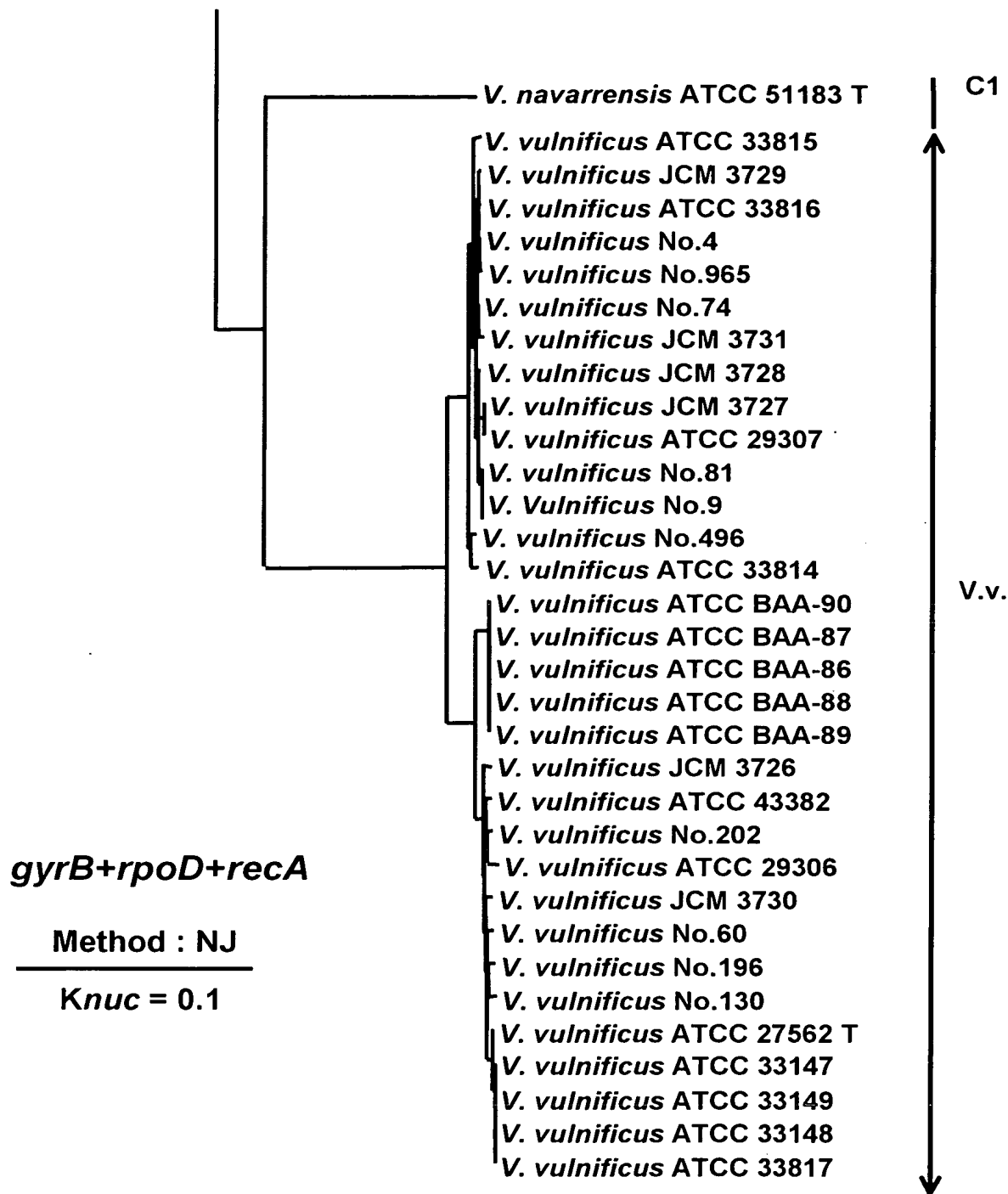


FIG. 2

gyrB-VV.con	1	GTGTCTGGCGGTC	TTACACGGTGTWGGYGTTCGGTGGT	RAACGCAYTGTCTGAAAAAGTR	60
2,3,4gyrB.con	1	H.N.Y.Y.Y.R.Y.B.N.K.K.N.N.B.Y.V.N.W.....D			60
		** ** ** *	** ** ** *	** ** ** *	
gyrB-VV.con	61	CTRYTKACGATTCA	TCTGTTGGTGCATACYCAYAGCCAAACCTATC	GTGCATGTTGTGCCT	120
2,3,4gyrB.con	61	YWD..N..Y..YY.Y..YRRY..HVMN.YB...WCN.....B..YRY..Y.B..D..D			120
		** ** ** *	** ** *	***** **	
gyrB-VV.con	121	GATGCACCGCTTGCTATCATCGGYGATACYGAAAAAACCGGTAC	CGGTACGTTTCTGG		180
2,3,4gyrB.con	121	C.A.YN..VY.RDSBG.DG.N..W..D..N..DMRH..H..D..H..VB.D..Y..Y...			180
		* * ** *	* * ** ** *	** ** ** *	
gyrB-VV.con	181	CCAAGTGCKSAAACCTTCASCAACATCGAATTTCATTATGACATCCTAGCGAAGCGTYTA			240
2,3,4gyrB.con	181	.D..Y..H..V..B..Y.C...Y..Y....Y..Y..Y..H..YY.N..T..R..Y..R			240
		** ** ** *	** ** ** *	** ** ** *	
gyrB-VV.con	241	CGTGAGCTCTCTTYCTGAACCTCKGGGTGTCKATCAAACTGTTTGATGAGCGCGAAGAA			300
2,3,4gyrB.con	241	.Y..R..B..W...Y.R..Y..W..B..N..V..YMRDY.RHNN..Y..R..H...MR			300
		** ** ** *	** ** ** *	** ** ** *	
gyrB-VV.con	301	GATAAGRAAGATCACTTCATGTATGAAGGTGGTATTCAGCGTTYGYACTCACTTGAAC			360
2,3,4gyrB.con	301	.Y..RM.M..Y..Y..Y.KR..Y....K..K..YMR...R....KRSY..YY.N..Y			360
		** ** *	** ** ** *	***** **	
gyrB-VV.con	361	CGCAACAARACMCCCATCCATGAAAAAGTATTCATTYAAKYCAGCGTGAAGACGGK			420
2,3,4gyrB.con	361	.Y..Y..A..B..V..Y....V....V....Y....R.HMW..V....M..Y..B			420
		** ** ** *	** ** ** *	***** **	
gyrB-VV.con	421	ATTGCKGTTGAAGTGGCGATGCAGTGGAAACGATGGYTTCCAAGAAAAACATCTACTGTTT			480
2,3,4gyrB.con	421	.YYWSB..K....V..V....R....Y..Y.....R....R....Y....Y...			480
		** ** ** *	** ** ** *	***** **	

FIG.2

gyrB-VV.con	481	ACCAACAACATCCACAGCGTGAYGGTGGTACCCACTAGCGGGTTCCGYGCGGCATG	540
2,3,4gyrB.con	481	.Y.Y.Y.Y.D.R.Y.T.B.DR.H.Y.R.B.D.....SN..VY.R	540
		** * * * * * * * * * * * * * * * * *	
gyrB-VV.con	541	ACGGGCACAYTGAACAGCTACATGGACAAAGAGGYTACTCRAAGAAAGCGAAACCGCG	600
2,3,4gyrB.con	541	.B..H..B..N..Y.M..WY.....H..R.....S.WYWSS..R.....SM..R.VK.R	600
		** ** ** ** * * * * * * * * * * * * * * * * *	
gyrB-VV.con	601	ACTTCTGGYGAYGATGCGCGTGAAGGTTTGACYGCWGTGTTTCAGTHAAAGTRCCGGAT	660
2,3,4gyrB.con	601	.V..K.....K.....Y..R..N..N..B..N..D..B.....D..D...	660
		** ** ** ***** ** ** ** ** * * * * * * * * * * * *	
gyrB-VV.con	661	CCAAAATTCTCAAGCCAAACYAAAGACAAACTGGTTTCTAGYGAAGTRAAGTCCGCAGTG	720
2,3,4gyrB.con	661	.W..R.....N.....Y..RY.R..B..WTCB..R.....RD.N..R..K	720
		** ** ***** ** ** ** * * * * * * * * * * * *	
gyrB-VV.con	721	GAATCCTTCATGGCAGACAAACTGAACGACTTCTTRGCGYGARCAACCCAAAGCGGAAA	780
2,3,4gyrB.con	721	.R..DGCN...RRY..R..RY.BRMN..B..YY....N...M.Y..HWSY.....N...	780
		** ** *** ** ** * * * * * * * * * * * * * * * *	
gyrB-VV.con	781	ACCGTTTGTTCTAAGATTATCGACGCGCGACGCGTGCGGTGAAGCAGCRCGTAAAGCGCGT	840
2,3,4gyrB.con	781	MHV..B...WSN..R..Y..Y..T..V..D..H..N..Y.....V..V.....N..B	840
		** ** ** ** ** ** * * * * * * * * * * * * * * *	
gyrB-VV.con	841	GAAATGACRCGCGCGTAAAGGGCGRTTAGAYCTTGCTGGCCTTCCW	885
2,3,4gyrB.con	841	.R....N..Y.....B...Y.V...Y.NR.W..YY.D..N	885
		** ***** ** ***** ** ** * *** * * * * * * *	

FIG.3

rpoD-VV.con	1	ACTCGTGAAGCGGAAATCGACATCGCTAAMCGAATTGAAGATGGTATCAACCAAGTACAG	60
2,3,4rpoD.con	1	..W..Y.....Y..R..Y..T..Y..B..R..Y..Y.....W.....Y.....W..A	60
		** ** ***** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ***** ***** **	
rpoD-VV.con	61	TCSTCTGTGTGAATACCCAGGAACCATTCCTTATATCTKGAACAGTTCGACAAAGTA	120
2,3,4rpoD.con	61	HSYK.NR.K..Y..R..Y..H..H..N..Y..W..Y..YY.W..R..R..Y..YMRD..K	120
		* *	
rpoD-VV.con	121	CAAGCGGAAGAACTTCGCCTMACTGATCTTATCAGTGGTTTGTGATCCAAATGCAGAT	180
2,3,4rpoD.con	121	.WD..H..R..RY.W..YY.V..H..YM.N..YWSH..Y..YR.H..Y..DR.YKMHWRB	180
		* *	
rpoD-VV.con	181	GAAACGGCWGCTCCAACCGCAACACACATYGGTTCAGAGCTGCAGAATCTGATTGGAA	240
2,3,4rpoD.con	181	.V.RSNRMN..N.....N..D..N..Y..C..Y..W..RY.ND.HRRNK.N..YC.N.MD	240
		* *	
rpoD-VV.con	241	GATGAAGACAAYACCGACATCGACGATGAAGACGAAAGAYNNNNNNGAAGATGGCGAT---	297
2,3,4rpoD.con	241	..Y..M..YRR.RMN.WYVMB..NSWY.....Y..D...GAVGAY.RM..YR.Y..HRRY	300
		** ** ** * * * * * * * * * * * * * * * * * *	
rpoD-VV.con	298	TCAAGCAGYGATTACAGAGGAMGATGTCCGGCATCGACCCCTGAAATGGCGCTAGAGAAGTTY	357
2,3,4rpoD.con	301	DVMRVYDVHRRYDVY..W..A..DRYN..H..Y..Y.....RS.B..DYKW..R..A....	360
		** ** ** * * * * * * * * * * * * * * * * * *	
rpoD-VV.con	358	ACTCARCTTCGTAACAGCTAYCAGAAATCTGCAACTTGCCCKTRAATGAACATGGTCGAGAG	417
2,3,4rpoD.con	361	.MYS..Y.D..YRRYMRV.W...RR.YB.D..RY.H..KRW..Y..RYWY..YNRYR.N	420
		* *	

FIG. 3

rpoD-VV.con	418	AGTGTCAAACAGCTCAAGCCCATGAACATGATGCTCGATGTGTTAAAGAGTTTCGTCTA	477
2,3,4rpoD.con	421	..YNMHMTRRYHBMNS....NHMRRVB.DR.RY.VRMDR.H..CMRH..R..Y..HY.V	480
		**** * * * * * * * * * * * * * * * *	
rpoD-VV.con	478	ACDCCGAAGCAGTTTGACCATTTGGTTAACGAACCTCGCACCGCYATGGATCGCGTTCGT	537
2,3,4rpoD.con	481	..R..D..R..R..Y..YY.YY.N..HRMHRMD..DM.Y.MHK.D....W..Y..D..Y	540
		** ** ** ** ** ** * * * * * * * * * * * * * * * *	
rpoD-VV.con	538	ACKCAAGARCGYTTGATCATGAARTCTGCGGTAGAAATCGCSAARATGCCRAAGAARTCK	597
2,3,4rpoD.con	541	..H.....Y..R.V...MRVD.N.YD..Y...DWM.SB.....D..R.....R	600
		** **** ** * * * * * * * * * * * * * * * *	
rpoD-VV.con	598	TTYATYGCWCTCTTYACTGGCAACGARTCWARCAGAAGAAATGGTTAGATMAGATCCTMGYY	657
2,3,4rpoD.con	601K.NB.V.....H..Y..Y.....NR.Y..N.MD...Y.N..YV.RR.NM.Y.CD	660
		***** * * ***** ** * * * * * * * * * * * *	
rpoD-VV.con	658	TCTGAYAAAGCCRTACGYAGAAAAGATYAARCTKCACGAAGAAGACATTCGTCGTTCAATC	717
2,3,4rpoD.con	661	W.H..H..R..W..Y..WSMV..RR.HMGHSMV.H....VRHB..Y..Y..Y..W..Y	720
		* ** ** ** * * * * * * * * * * * * * * * *	
rpoD-VV.con	718	DCCAAGCTAAGACCAATTGAAGAAGAAACGTCGCTTTCAGTRARCAACATCAAAGACATC	777
2,3,4rpoD.con	721	SMN..RY.DMRDRYB..Y..RS.R..R..N..WY.NDMK..DV.NMRY..Y.....Y..Y	780
		** *	
rpoD-VV.con	778	AGCCGTCGTATGTCTATMGGTGAAGCMAAAGCTCGCCGTGCG	819
2,3,4rpoD.con	781Y..Y.....W..Y.....R..D....W..Y..D...	822
		***** ** ***** ** ***** ** ***** ** ***** *	

FIG. 4

recA-VV.con	1	● CCAATGGCGCGTATCGTTGAAATTTTGGTCCAGAATCTTCAGGTAACACCGTTGACC	60
2,3,4recA.con	1	..R....D..D..Y..N..RR.B.WY..Y..W....D..V..W....N..VY.R..N	60
		** ***** ** ** ** * * * * * ** ***** ** * * *	
recA-VV.con	61	● CTTGAGCTGATCGCTGCRGCTCAACGTGAAGGCAAACTTGTGCGTTATCGATGCGAG	120
2,3,4recA.con	61	..K..RY.R..Y..NK.W..R..R..H.WR..Y....B....B..Y..Y....N..R	120
		** ** *	
recA-VV.con	121	● CACGCGTTRGATCCTGTGATGCGAAGAACTTGGCGTWAATATCGACCACTTTRTTGGTA	180
2,3,4recA.con	121	..Y..NY.N..Y..NR.Y..Y..BMRV...Y.S..B..B..B..YR.YS.DC.VY.B..B	180
		** ** *	
recA-VV.con	181	● TCTCAGCCYAYACBGGTGAACAAGCRTTGGAAATCTGTGATGCKCTTGCTCGCTCAGGK	240
2,3,4recA.con	181	..W..R..W.....Y..R.....C.D.....H.....Y..NY.R..N..Y..T...	240
		** ** *	
recA-VV.con	241	● GCGGTTGAYGTTATTGTTGTCGAYTCTGKCGMGCATTGACRCCAAAGCGCAGAAATYGAA	300
2,3,4recA.con	241	..NR.N....B..B..BR.Y....N..N..D..NY.R....R..A..N..R.....	300
		** *	
recA-VV.con	301	GGTGAGATGGGYGAYTCGCACATGGGTCNCAAGCTCGTATGCTMTCTCAAGCGATGCGT	360
2,3,4recA.con	301	..B..R.....WSS..Y....B....R..D.....Y.B..B.....R.....	360
		** ** *	

recA-VV.con	361	AAGYTAACGGGKAACCTAAARCAAGTCTAACTGTATGTGTATCTTCATYAACCAGATYCGT	420
2,3,4recA.con	361	.R..V..K..Y..Y.N....R..N..Y..Y....Y..Y.....R.....R.....K	420
		** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** *	
recA-VV.con	421	ATGAAGATYGGKGTGATGTTTGGTAAYCCAGAAACCACAAACRGGTGGTAACGCWCTGAAA	480
2,3,4recA.con	421R.....T.....Y..Y..C..W..R..H..M..N..Y.....Y..N..D..R	480
		***** ***** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** *	
recA-VV.con	481	TTCTACGCTTCTGTWCGTCTTGATATTGCGCCGTACTGGTGCRCATCAAAGAAGGYGATGAG	540
2,3,4recA.con	481	.Y..Y.....D....YY.D....Y..Y.....D..BK.D..Y.....R..H..H..A	540
		** ** ***** ***** * ***** ** ***** ** * ** ***** ** ** ** *	
recA-VV.con	541	GTMGTTGGTAAYGAAACGGGYATCAAAGTGTGTAAGAAATAAGATCGCTGCGCCGTTTAAA	600
2,3,4recA.con	541	.B..N..B.....N.....Y..R..N..K..R..Y..R..Y..N..N..V.....R	600
		** ** ** ***** ***** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** *	
recA-VV.con	601	GAAGCCAAYACYCAAATTATGTAYGCCARGGCWTTAACCCGYGAAGGY	648
2,3,4recA.con	601	S.R..BR....B..R..YM.K.....H..A..BT.Y..Y.....R..T	648
		* ** ***** ** ** * ***** ** ** * ** ***** ** *	